IN THE CLAIMS:

Please amend claims 4-8 as follows:

1. (Withdrawn) A microarray chip comprising a plurality of spots arranged in a predetermined positional relationship, wherein some of the plurality of spots provide index information for specifying the microarray chip.

2. (Withdrawn) A microarray chip comprising a plurality of element spots arranged in a predetermined positional relationship, wherein spots which provide index information for specifying the microarray chip are positioned along with the element spots.

3. (Withdrawn) A microarray chip according to claim 1 or 2, wherein the spots which provide index information include spots containing a detective colorant and spots free of the detective colorant as to give index information by the presence or absence of the detective colorant.

4. (Currently Amended) A method for indexing a microarray chip with a plurality of spots arranged in a predetermined positional relationship thereon, comprising:

selecting some of the plurality of spots as index spots;

spotting at least one biological element onto one of remaining spots as a non-index spot;

indexing the microarray chip spotted with said ~~on-chip-element~~ biological element by selectively providing at least one kind of detective colorant onto the index spots ~~based upon index~~ thereby coding in the index spots a unique microarray index value, said microarray index value being linked to element information[[,]] which includes a type of said ~~on-chip-element~~ biological element and a ~~corresponding~~ location of said non-index spot on the chip; and

~~automatically~~ automatedly identifying the microarray chip by detecting said detective colorant provided on said index spots.

5. (Currently Amended) A method for indexing a microarray chip with a plurality of spots arranged in a predetermined positional relationship thereon, comprising:

selecting some of the plurality of spots as index spots;

spotting at least one biological element onto one of remaining spots as a non-index spot;

indexing the microarray chip spotted with said ~~on-chip-element~~ biological element by selectively providing at least one kind of detective colorant onto the index spots ~~based upon index~~ thereby coding in the index spots a unique microarray index value, said microarray index value being linked to element information which includes a type of said ~~on-chip-element~~ biological element and a ~~corresponding~~ location of said non-index spot on the chip; and

reproducing the ~~index~~ element information by detecting the presence or absence of said detective colorant provided on the index spots thereby ~~automatically~~ automatedly identifying the microarray chip.

6. (Currently Amended) A method of indexing a microarray chip according to claim 5, wherein the index spots are arranged in a two-dimensional matrix including some of the index spots designated as parity spots and provided with said detective colorant based upon a parity algorithm running by row and by column of the matrix, and

upon reproducing the ~~index~~ element information, the parity spots are checked for errors.

7. (Currently Amended) A method for indexing a microarray chip according to claim 4, further comprising the steps of:

constructing a database for storing an element information record, a microarray chip master record, and ~~an on-chip-element~~ a biological element information record;

recording information of said ~~on-chip-element~~ biological element on the element information record with an element index;

recording information of the microarray chip on the microarray chip master record with a microarray index;

recording, on the ~~on-chip-element~~ biological element information record, information of the microarray index, said ~~corresponding~~ location of said non-index spot on the microarray chip, said element index of said ~~on-chip-element~~ biological element spotted on said ~~corresponding~~ location, and information of experiment conducted and

measurement taken in said non-index spot;

linking the microarray chip with the microarray chip master record as well as the ~~on-chip-element~~ biological element information record via the microarray index coded in the index spots; and

linking the ~~on-chip-element~~ biological element information record with the element information record via the element index.

8. (Currently Amended) A method of indexing a microarray chip according to claim 4, wherein some of the index spots are designated as parity spots and provided with said detective colorant based upon a parity algorithm, and

upon reproducing the ~~index~~ element information, the parity spots are checked for errors.